

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/519,129 03/06/00 UEDA

K A-346

000802  
DELLETT AND WALTERS  
310 S.W. FOURTH AVENUE  
SUITE 1101  
PORTLAND OR 97204

IM71/0529

EXAMINER

ANGELEFRANNIDT, M  
ART UNIT PAPER NUMBER

1756  
DATE MAILED:

05/29/01

7

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks**

## Office Action Summary

Application No. 09/519,129	Applicant(s) Ueda et al.
Examiner Martin J. Angebranndt	Art Unit 1756



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1)  Responsive to communication(s) filed on Jun 22, 2000
- 2a)  This action is FINAL.      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.
- Disposition of Claims
- 4)  Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-11 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.
- 12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- 13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

- 15)  Notice of References Cited (PTO-892)      18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16)  Notice of Draftsperson's Patent Drawing Review (PTO-948)      19)  Notice of Informal Patent Application (PTO-152)
- 17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_      20)  Other: \_\_\_\_\_

Art Unit: 1756

1       Claims 3-7 and 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

“a separator” and “a supporting film” have already been introduced in claims 1 and 8 respectively and these claims should refer back to it. (proper antecedent basis)

Is the lamination with the elements added in the recitations of claims 3,5,10 and 11 a second lamination step on the opposite side of the substrate ? (see Ueda JP 09-054539). If this is the case than it should be clear that the supporting film and the separator are the second of their kind.

2       The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3       (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4       Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Weber et al. ‘662.

The film and sample preparation portions of this reference describes the coating of the support with the photopolymer solution and the covering of this with a coversheet. The coated films were stored in black polyethylene bags until used. The cover sheet was removed from the

Art Unit: 1756

photopolymeric film and the film was laminated onto a 10 x 13 cm clear glass plate. The holographic exposure and processing was then performed.(col 10/line 45-col 11/line 25). The provision of the adhesive layers to form the ply prior to exposure is disclosed. (7/65-8/10) Useful adhesive layers in the ply are disclosed. (8/45-62).

5       Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Monroe et al. '112.

Monroe et al. '112 teaches a polymerizable layer between an PET support and a polyethylene or PET protective layer, which is cut, the cover sheet removed and then mounted to a piece of glass by hand lamination. (6/33-49 and 14/36-15/3). A transmission hologram is formed.

6       Claims 1,2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monroe et al. '112 or Weber et al. '662.

It would have been obvious to one skilled in the art to preform the peeling and/or lamination steps by hand where the elements are oriented vertically as this is a comfortable orientation for peeling and/or lamination when not using a supporting surface to perform these operations (ie a table or the like).

7       Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda JP 09-054539, in view of Monroe et al. '112.

Ueda JP 09-054539 teaches holographic dry plates which comprise either a supporting film, a photopolymeric holographic recording medium, a substrate, a tacky adhesive layer and a

Art Unit: 1756

light absorption film or a supporting film, a photopolymeric holographic recording medium, a substrate, a light absorbing adhesive film and a substrate. The peeling of the separator from the photosensitive layer and the support and contacting it with one side of a support and peeling the separator from a tacky adhesive layer and light absorption film and contacting it with the other side of the support is disclosed. (abstract).

It would have been obvious to one skilled in the art to use the manual processes of Monroe et al. '112 to perform the peelings and/or laminations of Ueda JP 09-054539 with a reasonable expectation of achieving the desired results without the need for expensive equipment. Also it would have been obvious to one skilled in the art to preform the peeling and/or lamination steps by hand where the elements are oriented vertically as this is a comfortable orientation for peeling and/or lamination when not using a supporting surface to perform these operations (ie a table or the like).

8       Claims 8 and (10-11/8) are rejected under 35 U.S.C. 102(b) as being fully anticipated by Brady et al. '546.

Brady et al. '546 teaches a wafer substrate which is coated with a photoresist (photopolymer) material. The photoresist laminate is precut, with the photoresist sandwiched between a MYLAR and a polyolefin sheet and bonded to a transport tape. The polyolefin layer is removed and the exposed portion of the photoresist is contacted with the wafer and adhered thereto.

Art Unit: 1756

The limitations of claims 10 and 11 are considered intended use as the means are described as means for handling these films and the films are not described as part of the apparatus.

9       Claims 8 and (10-11)/8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al. '546, further in view of Ueda JP 09-054539.

The examiner holds that the limitations of claims 10 and 11 are considered intended use as the means are described as means for handling these films and the films are not described as part of the apparatus, but anticipates the possibility that the applicant will add the film as part of the apparatus limitations.

It would have been obvious to one skilled in the art to use the means disclosed by Brady et al. '546 in the process of Ueda JP 09-054539 with a reasonable expectation of achieving the desired result based upon the disclosed functionality within the photoresist handling art and with the advantage of continuous processing.

10      Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al. '546, in view of Garber '221 and Platzer et al. '873.

Garber '221 teaches the lamination of photoresist material in a vertical orientation and cutting of the film to fit. The benefit of the more vertical orientation is that the resist is applied without wrinkles or the like.

Platzer et al. '873 teaches an apparatus for peeling carrier films from photoresists and the like which require little horizontal space and does not require the use of an adhesive tape or element to perform the peeling. (2/67-3/5).

Art Unit: 1756

It would have been obvious to one skilled in the art to use the means disclosed by Garber '221 and Platzer et al. '873 in place of those used in the process of Brady et al. '546 based upon the disclosure of equivalent function and the reduced space requirements and wrinkling disclosed as advantages or to use orient the peeling and lamination apparatus of Brady et al. '546 to gain the advantages attributed to this orientation by Garber '221 and Platzer et al. '873.

11 Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady et al. '546, in view of Garber '221 and Platzer et al. '873, further in view of Ueda JP 09-054539

The examiner holds that the limitations of claims 10 and 11 are considered intended use as the means are described as means for handling these films and the films are not described as part of the apparatus, but anticipates the possibility that the applicant will add the film as part of the apparatus limitations.

It would have been obvious to one skilled in the art to use the means disclosed by Brady et al. '546 as modified by Garber '221 and Platzer et al. '873 in the process of Ueda JP 09-054539 with a reasonable expectation of achieving the desired result based upon the disclosed functionality within the photoresist handling art and with the advantage of continuous processing.

12 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ryan et al. '383 establishes that the provision of an antihalation layer to minimize the noise from reflections at air-coating interfaces such as the backside of the recording layer or support is old and well known in the holographic art. (1/23-50 and 2/65-3/12)

Art Unit: 1756

Mickish et al. '100 teaches the use of various antireflection coatings in holographic recording.

Ishikawa et al. '850 teaches the provision of AR coatings or absorptive substrates to reduce noise fro backreflections. (3/44-50)

13 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Angebranndt whose telephone number is (703) 308-4397.

I am normally available between 7:30 AM and 5:00 PM, Monday through Thursday and 7:30 AM and 4:00 PM on alternate Fridays.

If repeated attempts to reach me are unsuccessful, my supervisor may be reached at (703) 308-2464.

Facsimile correspondence should be directed to (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.



---

Martin J. Angebranndt  
Primary Examiner, Group 1750  
May 23, 2001